

Notice of Allowability

Application No.

10/695,842

Examiner

Sara Addisu

Applicant(s)

NOMURA, TAKUJI

Art Unit

3722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/29/03.
2. ☒ The allowed claim(s) is/are 1-8.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date <u>6/9/04</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

Allowable Subject Matter

Claims 1-8 are allowed.

The closest prior art to the instant invention is Dearborn (U.S. Patent No. 3,153,356). Dearborn teaches a deep hole cutter (gun drill) having a cutting tip (13), a cutter head (12) with a rear connecting part for coaxial and detachable connection with a connecting part of a tool shank (11). Dearborn also teaches an axially extending V-notch in radial section to form chip groove (15) (defining a first outer discharge groove on the shank aligned linearly with a second discharge groove on the cutter head) ('356, figures 1 & 5 and Col. 4, lines 44-49). Furthermore, Dearborn teaches the shank (11) having a coolant supply passage (16) formed longitudinally therein communicating with the cutting head's coolant supply bore (17) ('356, figure 6 and Col. 4, lines 26-36). Although Dearborn doesn't teach the cutting head further having a discharge port formed in the front end substantially diametrically opposite the second discharge groove whereby the discharge port opens in the peripheral surface of the cutting head, this concept is known in the art as evidenced by Lindblom (U.S. Patent No. 6,682,275). Lindblom teaches a deep hole drill having a cutter head (1) provided with axially extending cooling ducts (13, 14) having first and second outlet ports formed in the front end and each positioned substantially diametrically opposite the other. Lindblom also teaches discharge openings/ports (15, 16) opening in the peripheral surface of the

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cutting head on one end and being connected to an interior channel on the other end ('275, Figures 4 & 8 and Col. 2, lines 62-67 and Col. 3, lines 7-16). Lindblom also teaches the cutting head (1) having a plurality of cutting edges formed on the front end and having cutting edges facing each discharge port/opening (15, 16) ('275, figures 4 & 5).

However, Dearborn taken alone or in combination with Lindblom fails disclose, teach, or suggest to provide the cutting head with a bypass passage that connects the discharge port with an axially extending V-shaped groove.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sara Addisu at (571) 272-6082. The examiner can normally be reached on 8:30 am - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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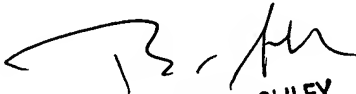
Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

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10/28/05


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PRIMARY EXAMINER